NK Technologies

INSTRUCTIONS



CTC Series

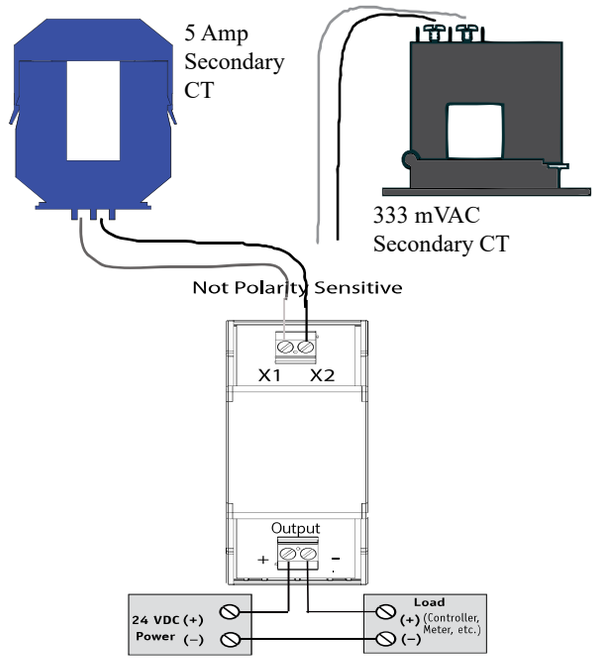
Signal Converter

Specifications

Power Supply	24 VDC loop powered (12-30 V)
Input Range	0-5 amp CT secondary 0-0.333 VAC CT secondary See ordering information
Output	4-20 mA, loop powered using a Class 2 power supply
Output Loading	<500 Ω @ 24 VDC
Mounting	Standard DIN rail or panel
Case	UL94 V-0
Dimensions	1.44”W x 4.21”D x 2.28”H (36.6 x 106.9 x 57.9 mm)
Environmental	-20 to 50°C 0-95% RH, Non-condensing
Listings	UL and cUL approved, RoHS compliant

VERY IMPORTANT!
DOUBLE CHECK THAT THE CT OUTPUT MATCHES THE CONVERTER INPUT! 5 AMP SECONDARY CTs CANNOT BE CONNECTED TO 333 mVAC CONVERTERS, AND VICE VERSA

Application



Use any 5 amp secondary current transformer, over the monitored circuit conductor, and the CTC-05A-420-24L-DIN signal converter will change that signal into the industry standard 4-20 mA signal for use with most programmable logic controllers, panel meters or data acquisition systems.
The CTC-333-420-24L-DIN cannot be used with 5 amp secondary CTs, and must be used with NK ProteCT® low voltage output type CT.

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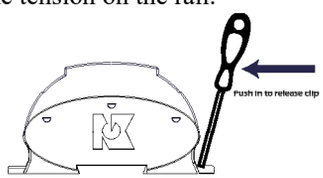
Models Covered

Model	Output	Input
CTC-05A-420-24L-DIN	4-20 mA	5 A CT
CTC-333-420-24L-DIN	4-20 mA	0.333 VAC

Instructions

1. Mount the CTC signal converter to a standard DIN rail.
2. Attach the current transformer (CT) leads. The attachment is not polarity sensitive. The CT must be de-energized. ***BE SURE THE CT OUTPUT MATCHES THE CONVERTER INPUT REQUIRED!***
3. Connect control wiring.
   A. Use 22-12 AWG copper wires rated 75°C minimum. Tighten terminals to 6 inch-pounds torque.
   B. Connect a Class 2, 24 VDC power supply in series with the output signal. The CTC requires no more than 2 VA to operate.
   C. Connect the output signal to the controller.
   D. CTC produces 20 mA when there is AC current through the CT aperture at the range or ratio limit.

To mount on DIN rail: Orient transducer so that input terminals X1 and X2 are upright/on top of unit and snap securely onto DIN rail. To remove, insert small screwdriver into the lower mounting hole of the spring loaded clip, and push the handle end of the screwdriver toward the sensor base to release the tension on the rail.



Troubleshooting

1. **Transmitter produces no signal**
   A. Check the wiring to the controller, especially polarity.
   B. Check the monitored circuit to be sure it is energized.
2. **Signal stays at 4 mA**
   A. Reverse output wiring to correct polarity.
3. **Signal stays at 20 mA**
   A. Check that the monitored circuit does not draw more than the rating of the current transformer.
   B. Change to a higher rated Current Transformer if needed.

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